

Preservation of Historical Materials

This information is geared towards what individuals can do for their personal and group collections to help minimize damage and deterioration to their archives. It may not be possible for individuals to follow all of the guidelines provided, but they are best-case situations. Individuals should identify preservation goals and try to reach them.

GENERAL PRESERVATION TIPS

NO PENS!

- Keep temperature and humidity as stable as possible.
- Avoid sources of heat (heating units, electronic appliances), damp (washing machines, bathrooms) and pollution (open windows, in a garage).
- Minimize exposure to light, which can cause fading.
- Don't stack boxes too high to avoid crushing materials and to avoid toppling in an earthquake.
- Keep food and drinks away from the collections to make it less attractive to bugs and rodents.

SPECIFIC TIPS BY MEDIUM

Photos and Photo Albums

Properties

- Color photos contain organic dyes that are more likely to fade than in black and white photos.
- Color transparencies ('positive' images, such as slides) are more color-fast (they are less likely to fade) than color negatives.

* Be sure to save your negatives! Negatives last longer than prints. *

Storage Environment

- Minimize light exposure.
- The best storage environment has a constant low relative humidity level and a constant temperature.
- Avoid using glue or tape on photos.
- Keep areas where photos are stored clean and pest-free. Bugs and rodents like to eat paper.

Storage Enclosures (including albums)

- Paper – paper can become acidic (have you noticed how fast newspaper becomes yellow and brittle?). Low acid paper or acid-free paper is good for photos
- Plastic – do not use plastics treated with plasticizers or vinyls (including PVC). They react with other materials. Try preservation-grade polyester ('mylar').

** If you are unsure about a type of plastic, try this: put a sample of the plastic in a clean glass jar with a metal lid in the sun for a week. Then open the lid and immediately sniff the opening. If there is a detectable odor, or if a cloudy film appears on the inside of the jar, that means the plastic is giving off chemicals and is degrading, and not suitable for preservation purposes. **

Common Concerns and Solutions

- Do not use bare hands when touching photos! Always use cotton gloves or nitrile gloves to avoid getting fingerprints or other substances on photos.
- Broken, torn, or cracked photos – put them in a polyester sleeve with a stiff archival board support. DO NOT USE TAPE or try to repair photos yourself! These can be scanned (usually) and “repaired” digitally to create a better looking copy.
- Dirty photos or negatives – brush the photos carefully with a soft clean brush, starting at the center and working towards the edges. Do not use cleaning liquids – they can cause permanent staining, scratches, and can cause image loss.
- Photos or negatives stuck to whatever they’re stored in – high humidity or liquid spills can make photos stick to each other or to their frames. Do not try to separate these, it can cause the photos to be ruined.
- Deteriorated negatives – If negatives are brittle, discolored, sticky, warped, wavy, or appear to have air bubbles, separate them from the rest of the collection and ask for safe storage recommendations. (Usually, either creating a duplicate, scanning, or simply housing the bad negatives in a separate place is recommended.)

Tapes – VHS and Cassette

Videotape and audiotape is a fragile medium that is easily damaged and deteriorates relatively quickly compared to other media. Even if stored carefully, it may only last a few decades. The components that make up tape deteriorate when there are extreme temperatures and humidity and/or when there is poor storage and handling.

Storage

- Ideally, cool and dry: 68 degrees, and 20-30% relative humidity. (At least – no basements or garages.)
- No direct sunlight.
- Avoid dirt, dust, and other pollution.
- Avoid storing near magnetic fields like the ones that are emitted from electrical appliances (like TVs and power tools.)
- Store on their ends, not flat/stacked on each other. Don’t leave a tape in a VCR.
- Store tapes in inert plastic containers.

Recording

- Make preservation copies of the most valuable tapes and keep them in a separate place, if possible.

Preservation

- Deteriorating tapes can be reformatted through duplication onto a new tape.
- Professional labs can reformat the tape to playable condition, and often copy the footage onto a CD or DVD or other digital format.

Documents and Scrapbooks

Chemical Reactions

The formation of acid in paper can be damaging. Acidic paper becomes very brittle, flakey, and discolored. Acidic paper damage can't really be reversed, but alkaline chemicals can neutralize acids.

The best way to slow down deterioration is to put items in acid-free folders ("archival" folders), put acid-free paper between items, and store materials in archival boxes when possible. Maintaining a constant, low temperature and a constant, moderate level of humidity goes a LONG way in keeping paper stable.

Storage

- Follow the directions about storage enclosures from the photos section above.
- Do NOT laminate! Use mylar sheets or other methods to protect papers.
- Don't overstuff enclosures – don't put too many documents, photos, or other items in envelopes, folders, or sleeves. It can cause the items to warp, curl, or bend.

Preparing for Storage

- Documents on poor quality paper should be separated from other documents, especially newspaper clippings. If time allows and the items are worth preserving in a new way, photocopy the newspaper clippings onto low-lignin paper. If saving the original clipping, fold a piece of acid-free paper around it to prevent the chemical reactions affecting other nearby papers.
- Unfold papers and items that can be unfolded safely and store them that way. Put oversized items together if necessary to save space. Do not tear the paper when unfolding.
- Take off paperclips, staples, pins, and any other fasteners if time allows. These can tear and bend the paper in the long run, make paper get rusty marks, and other problems.
- Store papers upright when possible – make sure documents are supported and do not slump. Fill the empty space with extra folders, supports, or other stuffing material to make sure the documents don't slide down.
- Do not overfill storage boxes. If space is at a premium, it is possible to use hanging folders in a file cabinet instead – but make sure to properly crease file folders and hanging folders to allow documents to rest flat along the file bottoms.

Books

Storage

- Maintain good air circulation.
- Store books upright on shelves and don't allow books to lean over.
- Support is important – shelve same-size books near each other, but separate oversize books.
- Never store books on their fore-edges (the long side opposite from the spine, where you would normally thumb the pages), because the text block can pull away from the binding if it is too heavy. Place spine down if necessary.
- Put fragile books in boxes.
- Remove non-book items from books, like bookmarks, paper scraps, and post-its.

Handling

- Don't pull books by grabbing the book by the top corner and pulling down. Instead, push the other books backwards on the shelf, and grab your book by the whole spine section.
- Be careful when photocopying books, avoid flattening them on copy machines which can damage the binding.

Digital Materials

LOCKSS – lots of copies keeps stuff safe!

Don't go overboard, but it is good to have multiple digital copies of files. It is best if the copies are geographically distributed in case of an accident. You can use external hard drives, cloud storage services, CDs/DVDs, and other methods.